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BUCHANAN INGERSOLL PC
One Oxford Center, 20th Floor
Pittsburgh, PA 15222



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	PATENT APPLICATION
	:	
WELLER et al.	:	MAGNETIC RECORDING
	:	MEDIA HAVING SELF ORGANIZED
Serial No.: unassigned	:	MAGNETIC ARRAYS
	:	
Filed: herewith	:	

#2
D. G.
2-4-02

jc997 U.S. PTO
10/005244
12/03/01

INFORMATION DISCLOSURE STATEMENT

Pittsburgh, Pennsylvania 15219

Box DD
Assistant Commissioner for Patents
Washington, D.C. 20231

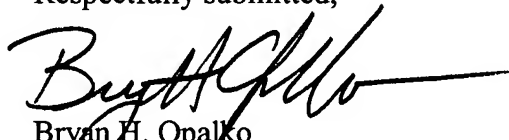
Sir:

Applicants submit herewith information of which they are aware which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. § 1.56. While this Information Disclosure Statement may be "material" pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to herein is "prior art" for the above-identified invention unless specifically designated as such. In accordance with 37 C.F.R. §§ 1.97(g)-(h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information exists, as defined in 37 C.F.R. § 1.56(a).

Submitted herewith is a copy of each reference, together with a Form PTO-1449 listing the art provided herewith.

This Information Disclosure Statement is being filed within three (3) months from the filing date of the above-identified application and, accordingly, it is believed that no fee is required. *See* 37 C.F.R. § 1.97(b)(1). However, if a fee is required for any reason, please charge Deposit Account No. 02-4553 the necessary amount.

Respectfully submitted,



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Dated: 12-3-01

Attorney for Applicants

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Substitute for form 1449A/PTO		Compleat if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	unassigned
		Filing Date	herewith
		First Named Inventor	Weller et al.
		Art Unit	
		Examiner Name	
Sheet 1 of 3	Attorney Docket Number	010949	

10/005244
12/03/01

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		us- 6,265,021	07/24/2001	Black et al.	
		us- 6,162,532	12/19/2000	Black et al.	
		us- 4,656,546	04/07/1987	Mallory	
		us- 5,603,766	02/18/1997	Visokay et al.	
		us- 5,210,673	05/11/1993	Ito et al.	
		us- 5,998,002	12/07/1999	Harada et al.	
		us- 5,993,956	11/30/1999	Lambeth et al.	
		us- 5,965,194	10/12/1999	Truong et al.	
		us- 5,942,342	08/24/1999	Hikosaka et al.	
		us- 5,851,656	12/22/1998	Ohkubo	
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴ - Kind Code ⁵ (if known)			

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	unassigned
		Filing Date	herewith
		First Named Inventor	Weller et al
		Group Art Unit	
		Examiner Name	
Sheet 2 of 3	Attorney Docket Number	010949	

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		S.H. CHARAP, PU-LING LU and YANJUN HE Thermal Stability of Recorded Information at High Densities IEEE Transactions on Magnetics, Vol. 33, No. 1, January 1997	
		Hitachi Develops World Highest Density HD April 5, 2000 Reuters Company News	
		Read-Rite First Shatter 50 Gigabit Per Square Inch Areal Density Barrier, March 30, 2000, PR Newswire	
		Fujitsu Develops HDD Media Technology with Potential for 300 Gb/sq. inch Recording Density; 56 Gb/sq.in. Recording Density Already Demonstrated, April 6, 2000 Business Wire	
		H.N. BERTRAM and M. WILLIAMS SNR and Density Limit Estimates: A Comparison of Longitudinal and Perpendicular Recording IEEE Transactions on Magnetics, Vol. 36, No. 1, January 2000	
		DIETER WELLER, ANDREAS MOSER, LIESL FOLKS, MARGARET E. BEST, WEN LEE, MIKE F. TONEY, M. SCHWICKERT, JAN-ULRICH THIELE and MARY F. DOERNER High K Materials Approach to 100 Gbits/in ² IEEE Transactions on Magnetics, Vol. 36, No. 1, January 2000	

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		Group Art Unit	
		Examiner Name	
Sheet 3 of 3	Attorney Docket Number	010949	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		SHOUHENG SUN, C.B. MURRAY, DIETER WELLER, LIESL FOLKS, and ANDREAS MOSER	
		Monodisperse FePt Nanoparticle and Ferromagnetic FePt Nanocrystal Superlattices Science, March 17, 2000; Vol. 287, pp. 1989-1992	
		S. SUN, D. WELLER and C.B. MURRAY "Self-Assembled Magnetic Nanoparticles Arrays" in Physics of Magnetic Recording Chapter 9, ed. Plumer, van Elk, Weller, Springer (2001)	
		G. HUGHES "Patterned Media" In Physics of Magnetic Recording, Chpt 7, ed. Plumer, van Elk, Weller, Springer (2001)	

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